

Notice of Allowability

Application No.

09/936,461

Examiner

Joseph D. Anthony

Applicant(s)

ROSSI ET AL.

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to applicant's written election filed 12/30/03.
2. ☒ The allowed claim(s) is/are 1-2,4-15,18 [renumbered as 1-2,3-6,8-15,7].
3. ☒ The drawings filed on 27 March 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Joseph D. Anthony
Primary Examiner
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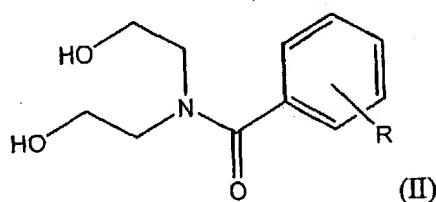
EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Katherine Brown on 03/04/04.

The application has been amended as follows:

Claim 1 (amended) A cross-linking mixture for polymers having free carboxyl groups, suitable for the preparation of powder paints, comprising at least one *Beta*-hydroxyalkylamide compound having a *Beta*-hydroxy functionality of 4 and at least one compound of formula (II)



where R is linear or branched C₂-C₁₀ alkyl group having a *Beta*-hydroxy functionality of 2, [two compounds having *B*-hydroxyalkylamide groups,] wherein said cross-linked mixture has a mean *Beta*-hydroxy [*B*-hydroxyalkylamide] functionality of between 2.1 and 3.9.

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In claim 2, line 2, delete "*B*-hydroxyalkylamide" and insert therefor—*Beta*-hydroxy—

In claim 4, line 1, delete "which" and insert therefor —wherein said *Beta*-hydroxyalkylamide compound--.

In claim 4, delete line 4-6 in their entirety counting the chemical structure (II) as one line.

In claim 11 (amended) the thermosetting powder paint according to Claim 7, wherein the molar ratio between the total *Beta*-hydroxyl groups [of the *B*-hydroxyalkylamide compounds] of [the] said cross-linking mixture and the carboxyl groups of [the] said polymer is between 2:3 and 3:2.

Claims 3, 16-17 and 19 have been canceled.

Before the first line of the specification insert:

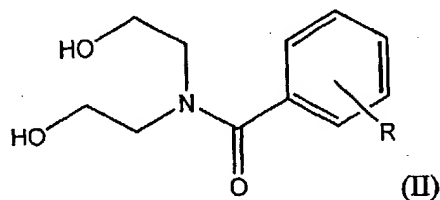
—This application is a 371 of PCT/EP00/00902 filed 02/04/2000.--.

Delete the title of the invention and insert therefor: —Cross-linking mixtures of *Beta*-hydroxyalkylamide and compound of Formula (II) and their use thereof--.

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Please add the following ABSTRACT OF THE DISCLOSURE

--Described herein are mixtures of cross-linking agents for the preparation of powder paints wherein the binder consists of polyester resins having free carboxyl groups. The cross-linking mixture itself comprises at least one *Beta*-hydroxyalkylamide compound having a *Beta*-hydroxy functionality of 4 and at least one compound of formula (II)



where R is linear or branched C₂-C₁₀ alkyl group having a *Beta*-hydroxy functionality of 2, wherein said cross-linked mixture has a mean *Beta*-hydroxy functionality of between 2.1 and 3.9.—

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2. The following is an examiner's statement of reasons for allowance: The above examiner's amendment was necessary to put the claims in condition for allowance by overcoming certain 35 USC 112 2nd paragraph issues and to overcome the WO 94/03545 reference.

The above claims as filed were indefinite because compounds of formula (II) are clearly not species that fall within the generic class of compounds known as *Beta*-hydroxyalkylamide, since formula (II) is a *Beta*-hydroxybenzalkylamide compound (i.e. has an aryl alkyl group). Although applicants may properly define the meaning of certain words, they are forbidden to define such words in a way that would be repugnant to their accepted meaning in the art.

The closest piece of prior-art is deemed to be WO 94/03545 which teaches powder-coating compositions that comprises mixtures of at least two compounds containing *Beta*-hydroxyalkylamide groups and each compound having different *Beta*-hydroxyalkylamide functionalities. The first compound has a *Beta*-hydroxylalkylamide functionality which is preferably 4, such as formula (II) on page 4 of WO's specification. The second compound has a *Beta*-hydroxylalkylamide functionality which is preferably 2, such as formula (IV) which is also found on page 4 of WO's specification. The weigh ratio of said first compound to said second compound is between 90:10 and 10:90 which directly encompasses applicant's claimed "mean *Beta*-hydroxy functionality of between 2.1 and 3.9".

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Applicant's claims, as amended above, are deemed to be both novel and unobvious over the WO reference. This is true because WO's second compound which has a Beta-hydroxylalkylamide functionality of preferably 2, excludes compounds that fall within applicant's claimed formula (II) since applicant's claimed formula (II) is limited to *Beta*-hydroxybenzalkylamide type compounds. Applicant's disclosure also shows that the polyesters cross-linked by mixtures that include a compound of formula (II) in lieu of mixtures comprising two compounds that are both Beta-hydroxylalkylamide compounds, have superior aesthetic appearances among other benefits. The examiner also incorporates the International Preliminary Examination Report into his reasons for allowance.

Another prior-art reference of note is Stretanski U.S. Patent Number 3,932,324. Stretanski discloses the addition of compositions that contain transition metal complexes as light stabilizer for polymers. Stretanski also teaches the further addition of thermal stabilizers to stabilize said light stabilizers. The thermal stabilizers of the formula listed in Stretanski's abstract encompass Beta-hydroxyarylalkylamides compounds. As such, Stretanski's said formula encompasses applicant's claimed compounds of formula (II). Nevertheless, applicant's invention is patentable over Stretanski because there is absolutely no disclosure or suggestion of any kind, to combined a Beta-hydroxyarylalkylamide compound with a Beta-hydroxyalkylamide compound having a functionality of 4 to produce a mixture that has a hydroxy functionality that ranges between 2.1 and 3.9. To combined Stretanski with any other listed references, such as WO

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94/03545, is deemed to be unobvious because Stretanski teaches the use of his Beta-hydroxyarylalkylamides compounds as thermal stabilizers for transition metal complexes which are not present in the compositions taught by WO. As such one having ordinary skill in the art would not be motivated to substitute Stretanski's Beta-hydroxyarylalkylamides compounds for WO's Beta-hydroxyalkylamide compound of formula (IV). In any case, applicant's specification has a showing of superior and unexpected results that come about when a Beta-hydroxyarylalkylamide compound is combined with a Beta-hydroxyalkylamide compound having a functionality of 4 to produce a mixture that has a hydroxy functionality that ranges between 2.1 and 3.9.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Prior-Art Cited But Not Applied

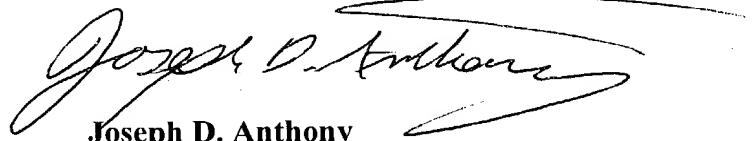
3. Any prior-art reference which is cited on FORM PTO-892 but not applied, is cited only to show the general state of the prior-art at the time of applicant's invention.

Examiner Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Joseph D. Anthony whose telephone number

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is (571) 272-1117. This examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 6:30 p.m. in the eastern time zone. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (571) 272-1119. The centralized FAX machine number is (703) 872-9306. All other papers received by FAX will be treated as Official communications and cannot be immediately handled by the Examiner.



Joseph D. Anthony
Primary Patent Examiner
Art Unit 1714

3/1/04